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206

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,597	10/25/2001	Martin Langhammer	ALTRP063/A579	8155
51501	7590	07/27/2005	EXAMINER	
BEYER WEAVER & THOMAS, LLP			PATHAK, SUDHANSHU C	
ATTN: ALTERA			ART UNIT	
P.O. BOX 70250			PAPER NUMBER	
OAKLAND, CA 94612-0250			2634	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,597

Applicant(s)

LANGHAMMER, MARTIN

Examiner

Sudhanshu C. Pathak

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-36 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on October 25th, 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Claims 1-to-36 are pending in the application.

Specification

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

3. The disclosure is objected to because of the following informalities:

The specification on Page 13, line 22 discloses "multiplexors" this should actually be "multiplexers".

Appropriate correction is required throughout the disclosure.

Drawings

4. Figures 4A & 4B should be designated by a legend such as "Prior Art" because only that which is known is illustrated.

Corrective Action is required.

Claim Objections

5. Claims 4, 7, 26, 34 & 36 are objected to because of the following informalities:

Art Unit: 2634

- Claim 4, line 2, refers to "constraint length L". However, the variable "L" is not defined. This should actually be ".....wherein L is an integer.....".
- Claim 7, line 2 refers to "multiplexors", this should actually be "multiplexers".
- Claim 26, line 2, refers to "about $2*v$ survivor vectors". However, the variable "v" is not completely defined. This should actually be ".....wherein v is an integer.....".
- Claim 34, line 4, refers to "traceback length v". However, the variable "v" is not completely defined. This should actually be ".....wherein v is an integer.....".
- Claim 36, line 4, refers to "traceback length v". However, the variable "v" is not completely defined. This should actually be ".....wherein v is an integer.....".

Appropriate corrections are required.

6. Claim 8, line 4, refers to "a predecessor or subsequent state", it is not clear as to if the state referred to is a predecessor state or a subsequent state.

Appropriate correction/clarification is required.

Allowable Subject Matter

7. Claims 1-36 are allowable over the prior art of record because the cited references do not contain the specified limitation of a viterbi decoder comprising: at least two data selection blocks, each of the at least two

Art Unit: 2634

data selection blocks having at least two inputs, an output, and control circuitry; at least two trace registers each having an input and an output, wherein the output of each of the at least two trace registers is connected to an input of one of the at least two data selection blocks and the input of each of the at least two trace registers is connected to an output of a corresponding data selection block; and circuitry for transmitting survivor vector values from a forward movement through a Viterbi trellis to the control circuitry for each of the at least two data selection blocks to select a signal corresponding to one of the inputs of the data selection block to appear at the output in order to select a predecessor best metric state in a traceback.

8. This application is in condition for allowance except for the following formal matters as disclosed in the above Office Action

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.


Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

Art Unit: 2634

- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571)-272-3056
- The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sudhanshu C. Pathak



STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
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